Feed the Future Country Fact Sheet

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Sustainable Intensification in the Ethiopian Highlands: First Year of New Program Lays Strong Groundwork for Research and Agricultural Development

In the Ethiopian Highlands, a massive mountainous area extending into parts of Eritrea and northern Somalia, smallholder farmers are facing serious threats to their livelihoods and food security. Crop yields and soil fertility are declining, while weeds, crop pests and disease, and fertilizer costs are all rising.

To address these challenges, a Feed the Future program is conducting participatory research (which actively involves beneficiaries of the research) to empower farmers to implement sustainable intensification, meaning they will ultimately be able to generate more output from the same area of land while reducing negative environmental impacts.

Feed the Future's sustainable intensification program is taking a comprehensive, four-pronged approach to overcoming these challenges to agriculture in the region, laying the foundation for smallholder farmers—especially women—to diversify their farming systems and meet their economic, social and environmental goals over the long term.

- *Legumes* – Feed the Future is training farmers in the Ethiopian Highlands to add a "legume rotation" to their crops rather than growing cereals exclusively. This kind of crop diversification improves soil fertility, reduces the risk of crop loss to disease, improves human nutrition, and provides fodder for livestock. The legumes project provided seeds to 370 farmers and trained a total of 528 farmers on double-cropping legumes with their cereals. Over 2,500 farmers are expected to participate by the end of the calendar year. The legumes project has also linked international, national, and regional researchers with development agents in Ethiopia so that the use of legumes can continue to be adopted by farmers and scaled up over time.
- *Trees* – Agroforestry, a method of integrating trees and shrubs with crops and/or livestock, is another way to make land-use systems more sustainable. Feed the Future is documenting local farmers' knowledge on trees to find out why they do or do not plant trees on farmlands, and identifying the most promising tree species and management options for integrating trees into Ethiopian crop and livestock systems.
- *Feeds* – One of the main obstacles to sustainable intensification in Ethiopia is the demand of feeding livestock, so Feed the Future is working to identify the greatest opportunities for intensification along the livestock feed value chain.
- *Water* – The fourth component of the program uses geospatial technology to map out potential zones in the Ethiopian Highlands for soil and water conservation practices, as well as irrigation intensification. These maps are based on a variety of development projections, biophysical data, market indicators, and livelihood practices.

Throughout all these activities, Feed the Future also builds partnerships between international and Ethiopian research institutions, government offices, national universities, and NGOs, setting the stage for local food security stakeholders to continue the momentum around sustainable intensification for agricultural development.

Feed the Future is also working on sustainable intensification in Ghana, Mali, Tanzania, and Malawi under an overarching research design, monitoring and evaluation framework, communications strategy, and collaborative management structure.

This story from Ethiopia comes from the Africa Research in Sustainable Intensification for the Next Generation (Africa RISING) program, part of Feed the Future's efforts in Sub-Saharan Africa, and is implemented by the International Livestock Research Institute. ***Learn more****.*